**STAYING ALIVE! CARDIOPULMONARY RESUSCITATION IN A PATIENT WITH LEFT VENTRICULAR ASSIST DEVICE**

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| **Introduction:** The resuscitating approach in an unresponsive patient with a left ventricular assist device (LVAD) is challenging due to its uncommon phenomenon. We report a case of cardiac arrest in a patient with LVAD in our centre.  **Case Description:** A 24-year-old male with non-ischaemic dilated cardiomyopathy and LVAD presented with sudden onset of breathlessness and chest discomfort. He was unresponsive, cyanosed and gasping with non-recordable blood pressure (BP) and non-palpable central pulse. Cardiopulmonary resuscitation (CPR) was commenced immediately and his airway was secured. Defibrillation and amiodarone were administered as the cardiac monitor showed ventricular tachycardia. His LVAD was functioning but the alarm showed “Low Flow” despite being on triple inotropic support. Subsequently, the patient developed asystole and succumbed to death.  **Discussion:** Resuscitating a cardiac arrest patient with a continuous-flow LVAD is difficult as they have peculiar haemodynamics. Continuous-flow LVAD results in a unique state of haemodynamically stable pulseless electrical activity (PEA) or pseudo-PEA. They do not have a palpable pulse and their normal heart sounds will be replaced with an audible “LVAD hum”. Hence, pulse oximetry and automated BP readings are difficult to obtain. Capillary refill time and skin colour are better indicators of adequate flow and perfusion. Alternatively, doppler, intra-arterial BP, and waveform capnography has been found to be useful in aiding perfusion assessment. Emergency providers should check the LVAD alarm and listen for “LVAD hum” over the chest to exclude device malfunction. Although there is a risk of device dislodgement during chest compression, unresponsiveness with inadequate perfusion prompts the provider to initiate chest compression following the advanced life support guideline.  **Conclusion:** Although it is rare to see patients with LVAD, emergency providers should be educated on how to assess the perfusion status of such patients. Resuscitation should follow a well-constructed guideline. In patients with circulatory arrest, LVAD failure should be opted out promptly followed by device troubleshooting concomitant with standard resuscitation. |

**Keywords:** advanced life support, cardiac arrest, left ventricular assist device.